

Claims

- PXB+P
1. A member for air motors in which the surface is heated at 450 to 580°C in a mixed gas atmosphere comprising 50 to 95% of hydrogen, and 5 - 50% of nitrogen and hydrogen sulfide, a DC voltage at 300 to 500 V is applied relative to an anode disposed in a vacuum chamber and a nitrosulphurization layer is formed on the surface by using a bright nitrogen diffusion method.
 2. A member for air motors as defined in claim 1, wherein the nitrosulphurization layer at the uppermost surface of the member has a hardness of 800 to 1200 of Vickers hardness.
 3. A member for air motors as defined in claim 1, wherein the ratio between the nitrogen and hydrogen sulfide in the gas mixture is from 0.01 to 99 parts by volume of the hydrogen sulfide content based on 100 parts by volume of the nitrogen content.
 4. A member for air motors as defined in claim 1, wherein the member is one or more of the rotor, cylinder, and front cylinder cover and the rear cylinder cover.